

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
13 October 2005 (13.10.2005)

PCT

(10) International Publication Number  
**WO 2005/094787 A1**

- (51) International Patent Classification<sup>7</sup>: A61K 9/08,  
9/10, A01N 25/24
- (21) International Application Number:  
PCT/US2005/009650
- (22) International Filing Date: 23 March 2005 (23.03.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/555,562 24 March 2004 (24.03.2004) US
- (71) Applicant and  
(72) Inventor: KROSS, Robert, D. [US/US]; 2506 Florin Court, Bellmore, NY 11710 (US).
- (74) Agent: SCHINDLER, Edwin, D.; Five Hirsch Avenue, P.O. Box 966, Coram, NY 11727-0966 (US).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

WO 2005/094787 A1

(54) Title: COMPOSITION AND METHOD FOR DRY COW UDDER PROTECTION

(57) Abstract: A composition for dry cow udder protection includes a bimodal interpenetrating polymer system having both cationic and anionic functionalities and capable of forming a stable aqueous solution and ionic bonds between polar chains. The bimodal inter-penetrating polymer system, preferably, includes two acrylate copolymers, Polyacrylate-18 and Polyacrylate-19. The bimodal interpenetrating polymer system is approximately 20% to approximately 40%, by weight, of the aqueous solution, and preferably has a thixotropic viscosity of from approximately 500 cps to approximately 5,000 cps, as measured with a Brookfield Viscometer at 20 rpm with a # 3 spindle. The composition, as part of an aqueous solution, is applied to the region of a cow teat to be protected and allowed to dry, resulting in a water-insoluble protecting film.